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ABSTRACT

In this monograph, the author presents a thesis that a genuine, pervasive innocence of perception underlies mature productive originality, and that it is based upon progression from the sense of awe and wonder and the natural spontaneity of childhood into integrated adult functioning with fine command of ways and means acquired through discipline and technique. An overview of major findings resulting from previous researchers at the Institute of Personality Assessment and Research on highly creative persons serve as the base for theory. In a study of creative architects, findings show that for certain activities a specific minimum I.Q. is probably necessary to engage in the activity, but that beyond the minimum, creativity is uncorrelated with I.Q. Moreover, other research findings suggest that it is a function of style or modes of experiencing that mark the highly creative person. Three stylistic variables of highly creative persons are that they are more perceptually oriented, intuitive, and are able to discern and to prefer more complexity in whatever it is that they attend to. To conclude, "In the creative adult, the child remains fully alive." (Author/SJM)

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RESEARCH MONOGRAPH #3
AN EYE MORE FANTASTICAL: FRANK BARRON

Published 1967 by the National Art Education Association,
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This is the third in a series of Monographs sponsored
by the Viktor Lowenfeld Memorial Fund.

INTRODUCTION: Kenneth R. Beittel

I am indeed pleased to introduce the third Research Monograph, sponsored by the Viktor Lowenfeld Memorial Fund. The contents are drawn from the Viktor Lowenfeld Memorial Lecture given at the 1967 NAEA National Conference in San Francisco.

Frank Barron, the author of this Monograph, has long been involved in research into creativity. His activities in this area are equivalent to that of his fellow pioneers, J. P. Guilford, Calvin W. Taylor, and E. Paul Torrance. In addition to numerous research articles and monographs, he is perhaps best known for his book *Creativity and Psychological Health*, published in 1963.

In this Monograph, Barron presents a thesis concerning "mature productive originality," its nature and origins, which is at variance with psychoanalytic formulations of the creative process in adults. He takes as his base three major findings resulting from his researches and those of his colleagues at the Institute of Personality Assessment and Research on highly creative persons. His rich language and the examples he draws from widely ranging literary sources make this a highly readable as well as a provocative theory on the origins of "an eye more fantastical."

Kenneth R. Beittel is professor of art education at the Pennsylvania State University.

THE MONOGRAPH

AN EYE MORE FANTASTICAL: Frank Barron

In this monograph I shall attempt to develop further a general thesis that I first set forth in my 1965 paper, "Creativity in Children." My essential claim is that a genuine, pervasive innocence or naiveté of perception underlies mature productive originality, but that the creative process in maturity is not based, as psychoanalytic theorists have argued, upon "regression in the service of the ego" (Ernst Kris' phrase), but upon progression, without loss, from the sense of awe and wonder and the natural spontaneity of childhood into integrated adult functioning with fine command of ways and means acquired through discipline and technique.

This thesis is one that I think Viktor Lowenfeld would find quite of a piece with his own formulation of the nature of creative activity. I am grateful for the opportunity to present my reflections on these matters in a publication honoring the memory of Lowenfeld.

Viktor Lowenfeld was fascinated by the problem of how visual forms are seen and represented by children whose eyesight is not normal. He was convinced that his own investigations had shown that in the evolution of individual vision each of us passes through a stage of "naturalistic perception" that characterizes also the evolution of vision from primitive man to modern man. In creative activity, he held, the visual sense "relinquishes its primacy," and universal symbols come to dominate the very process of seeing. The weak-sighted are thus strangely compensated for their inability to perceive the visual world "just as it is." Though their perception is primitive in the sense that their discrimination of form permits only a low level of differentiation of visual phenomena, it is closer to the archetypal and symbolic and is suffused with a sense of mystery which is the natural stuff of poetry and art.

Providentially, Viktor Lowenfeld left us, in his germinal work, *The Nature of Creative Activity*, dozens of photographic reproductions of the art work of the weak-sighted children whom he studied, and so we can go to his book and see at a glance what he means. I think of such examples as Plate 4, "Jacob's Dream," Plate 5a, "Drowning Man," Plate 8, "Being Throttled," and the incomparably expressive sculpted head titled "Longing for Sight," done by a congenitally blind boy.

Yet it would be misleading if I were to seem to suggest that Lowenfeld put primary stress on this theme, or dealt with it alone. His approach to the art of the weak-sighted was not sentimental, but scientific, and his main interest was in the relative predominance of "haptic" as opposed to "visual"

tendencies in his subjects. The concluding paragraph of *The Nature of Creative Activity* expresses well not only the substantive result of his work but the spirit in which he approached it. I quote:

> "As has frequently happened before, the study of an extreme case has resulted in the clarification of a certain field. In this case, an analysis of the phenomena of shape and form at the physiological frontiers of blindness demonstrated that it is the psychological attitude itself which determines to what creative type (haptic or visual) an artist belongs. The battle of the two impulses towards orientation in the world of appearances could have been nowhere better demonstrated than in this region, where, in order to possess a world of his own, man has himself to create its foundations."

I shall seek to enlarge upon this statement of Lowenfeld's by relating what the world gives to what the eye takes and makes of it. That is to say, I shall treat of the experiential fundaments of the ego, and its reaches. In doing so, I shall take as point of departure a trio of findings that have emerged from the researches of myself and my colleagues at the Institute of Personality Assessment and Research on the personality and intellectual characteristics of outstandingly creative persons. Let me begin by reviewing the most solidly established of our findings.

A result of fundamental importance came from our investigation into the relationship of creativity to intelligence quotient, taking the latter in its commonly accepted meaning as an index of performance on "intelligence tests."

Two statements must be made here, which at first may seem mutually incompatible:

(1) Persons of a high order of creative ability are usually in the upper 10%, or perhaps upper 5%, of the general population in terms of I.Q.

(2) Within groups of such persons, and even when highly creative persons are compared with merely representative persons in a profession which calls intrinsically for creative ability, there is usually zero correlation between creativity and measured I.Q.

A clearcut example of these findings is provided by the study of creative architects, carried out by Donald W. MacKinnon, director of the Institute, and Wallace B. Hall. MacKinnon and Hall compared 40 architects (who were drawn from the sample of 66 architects judged by the panel of experts to be the most creative) with two control groups: one selected at random

from the Directory of American Architects, and the other selected so as to match the highly creative group in certain characteristics, such as age, geographical location of their offices, and similarity of background in training and professional experience. They found that the high-level test of general intelligence we had employed because it is considered to provide accurately differential measurement in the high I.Q. ranges (the Terman Concept Mastery Test) failed to differentiate among the three groups. In order to counter objections that the test was too much limited to verbal reasoning, and that it was perhaps subject to errors of measurement because its administration was not individually monitored, they called upon their subjects some time after the original study to take another test: the Wechsler Adult Intelligence Scale, which is the most widely used and generally considered the most valid, factorially variegated, and comprehensive individually administered intelligence test. Again, the group averages proved to be virtually identical, all within one point of 130 I.Q. While similar retesting has not yet been completed for other groups studied, the findings with the Terman Concept Mastery Test for those groups have been quite similar. Creative writers score significantly higher than architects, and their estimated I.Q. is greater than 140. So too with mathematicians and scientists, and only in the mathematicians' sample is there a positive relationship between rated creativity and measured general intelligence. That relationship is small though significant. Among student painters who took part in one of our research projects at the Rhode Island School of Design, the correlation between their Scholastic Aptitude Test scores and faculty ratings of their creativity at the end of the three years was −.09.

The generalization suggested by these findings is that for certain activities a specifiable minimum I.Q. is probably necessary in order to engage in the activity at all, but that beyond the minimum, which often is surprisingly low, creativity is uncorrelated with I.Q.

If creativity is not a function of I.Q., what then is it a function of?

Most of all, our findings suggest, it is a function of *style or modes of experiencing*, or stylistic ways of using the mind. There are three distinct stylistic variables that we have found consistently to mark the highly creative person. Two of these are drawn from C.G. Jung's theory of psychological types, and the third rests upon the polar opposition between *preference for phenomenal complexity and asymmetry* and *preference for simplicity and symmetry* that some of my own work has established. Let us now consider this trio of findings.

I. The perceptual versus the judgmental attitude

According to Jung, whenever a person uses his mind for any purpose, he performs either an act of perception (i.e., he becomes aware of something) or an act of judgment (i.e., he comes to a conclusion, often an evaluative conclusion, about something). If one of these attitudes is strong in a person, the other is correspondingly weak. The judging attitude is said to lead to an orderly, carefully planned life based on relatively closed principles and categories, whereas the perceptual attitude leads to more openness to experience, including experience of the inner world of self as well as experience from without. The perceptual attitude facilitates spontaneity and flexibility.

In our studies, every group but scientists is predominantly perceptual rather than judgmental, and in every group, including scientists, the more creative individuals are more perceptually oriented and the less creative are more judgmentally oriented.

II. The intuitive versus the sense-perceptive attitude

The act of perception itself, according to Jung, may be of two kinds: *sense-perceptive* or *intuitive*. The sense-perceptive attitude emphasizes simple realism, and is a direct awareness of things as they most objectively are in terms of the evidence of the senses. Intuition, by contrast, is an indirect awareness of deeper meanings and possibilities. Creative individuals are characteristically intuitive. This is shown in test results on the Myers-Briggs Jungian Type Indicator, where scores on the Intuition Scale show more than 90% of the creative individuals we have studied to be predominantly intuitive. It has shown also in experiments and interviews devoted to what Mackinnon (1965) has called "transliminal experience," which on close examination proves quite similar to the Jungian definition of intuition. One such interview was devoted especially to the fantasy life, ranging from day dreams to night dreams and hypnagogic experiences to transcendental experiences in full and acute consciousness. An unusually high percentage of creative persons claim to have had experiences either of mystic communion with the universe or of feelings of utter desolation and horror. The prologues to these experiences were frequently described with considerable vividness in the interview, and this statistic does not represent a checking of "yes" or "no" to a question such as "Have you ever had a mystical experience?" Other experiences of an unusual sort were also described, such as being barraged by disconnected words as though one were caught in a hailstorm, with accompanying acute discomfort, or seeing the world suddenly take on a new brightness. A high

frequency of dreaming was also reported, as well as a high frequency of dreaming in color, as compared with control groups we have studied.

William Blake, a great artist both in writing and in painting, has made transliminal perception the basis of his interpretation of artistic experience. He spoke of "*four*fold vision." Single vision, for him, is simply what ordinary physical eyesight enables us to see: the world that the consensus of opinion, based on a limited use of the senses, would affirm as real. A tree is a tree, an inkblot is an inkblot, the sky is blue, and so on. Twofold vision is the still-limited act of imagination; a cloud formation looks like two lions fighting, or an elephant pushing a Mack truck; an inkblot "might be" two dancers, or a bird in flight, or a monk kneeling in prayer. In threefold vision, we do not see the mean thing-in-itself as in a single vision, nor the thing as it might be if it were a little, or even a lot different, as in twofold vision, but we see the thing as symbol. Recall the heavenly chorus at the conclusion of *Faust:*

> All things transitory
> but as symbols are sent;
> Earth's insufficiency
> *Here* grows to event.

The symbol presents a reality transcended. It is the medium through which a superior vision of reality is sought; it amplifies the poor real world by an act of imagination. The symbol, the play, the dream: these are the manifestations of threefold vision.

Fourfold vision is still a step beyond. It is the vision of the mystic, the seer, the prophet; it is vision suffused with the most intense feeling: horror, awe, ecstacy, desolation. A passage from Blake himself illustrates it well:

> "I assert for myself that I do not behold the outward creation, and that to me it is hindrance and not Action . . . "What," it will be Questioned, "When the Sun rises, do you not see a round disk of fire somewhat like a Guinea?" Oh, no, no, I see an Innumerable Company of the Heavenly host crying, "Holy, holy, holy is the Lord God Almighty." I question not my corporeal or Vegetarian Eye any more than I would Question a Window concerning a Sight. I look through it and not with it."

I will leave the finding regarding this aspect of perception by quoting part of a poem by William Butler Yeats that I think apposite. To the finding and the poem we shall return later.

"Some few remembered still when I was young
A peasant girl commended by a song,
Who'd lived somewhere upon that rocky place,
And praised the colour of her face,
And had the greater joy in praising her,
Remembering that, if walked she there
Farmers jostled at the fair
So great a glory did the song confer.

And certain men, being maddened by those rhymes,
Or else by toasting her a score of times,
Rose from the table and declared it right
To test their fancy by their sight;
But they mistook the brightness of the moon
For the prosaic light of day—
Music had driven their wits astray—
And one was drowned in the great bog of Cloone.

Strange, but the man who made the song was blind;
Yet, now I have considered it, I find
That nothing strange; the tragedy began
With Homer that was a blind man,
And Helen has all living hearts betrayed.
O may the moon and sunlight seem
One inextricable beam,
For if I triumph I must make men mad."

In this poem, illusion becomes part of the theme. Intuitive perception can lead one far astray if it goes unchecked. When light plays, it may play tricks. Yeats asks, Must the poet control the light to produce his effects? Will he indeed "drive men mad" if he can make fact and fancy seem one? These are important questions to consider if we are to arrive at an understanding of creative vision, "the eye more phantastical."

III. Complexity versus simplicity

One of our main findings, probably the one most solidly supported by diverse kinds of evidence, has to do with the relationship of complexity to simplicity, and of order to disorder. We have observed consistently that individuals identified as more highly creative seem to be able to discern and to prefer more complexity in whatever it is that they attend to. They prefer displays that are not readily ordered, or that present perplexing contradictions which cannot immediately be resolved. On the Rorschach Inkblot Test,

for example, creative individuals show a marked tendency to strive for a single synthesizing image in the inkblot which brings together many elements. This tendency shows itself in other tests as well. One such test is our "Symbol Equivalence" test. We present a stimulus image, such as leaves being blown along in the wind. Then we ask the respondent to create other images somehow equivalent to the stimulus. For example, leaves in the wind could be "clothes in a Bendix dryer, being tossed up and down, seen through the window," or "a civilian population fleeting before armed aggression," (i.e., scattered like untreed leaves before the winds of war). The responses of creative individuals to this test are marked by a finely differentiated complexity of symbolic equivalence.

Another test that we developed, not intended to be a measurement of this factor, but relevant to it, is called the Barron-Welsh Art Scale. This consisted originally of 400 line drawings in black ink on 3" x 5" white cards. We asked some 80 painters throughout the United States to take this test. We asked them to say which ones they liked and which ones they disliked. We compared their likes and dislikes with those of people in general and then we picked out those figures which showed a big percentage difference of like and dislike between painters and others. Those were cast into a scale to yield a score representing one's degree of resemblance to painters in such preferences. Painters prefer figures that are more challenging, in the sense that they are more complex than the other figures, and less obviously balanced. The kinds of figures disliked by painters are generally static rather than dynamic, and constructed by a geometric principle easily deduced at a glance. They are generally cleaner. The other figures are frequently described as messy, or even chaotic in some cases. Our finding has been that creative individuals, whether artists, scientists, architects, or writers prefer the kinds of figures that the painters in the original standardization group preferred.

I have interpreted these and related findings elsewhere (in my book, *Creativity and Psychological Health*) as follows:

"We are dealing with two types of perceptual preferences, one of them being a choice of what is stable, regular, balanced, predictable, clear-cut, traditional, and following some general abstract principle; the other a choice of what is unstable, asymmetrical, unbalanced, whimsical, rebellious against tradition, and at times seemingly irrational, disordered, and chaotic.

"We suggest that the types of perceptual preferences we have observed are related basically to a *choice of what to attend to* in the complex of phenomena which make up the world we experience; for the world *is* both stable

and unstable, predictable and unpredictable, ordered and chaotic. To see it predominantly as one or the other is a sort of *perceptual decision;* one may attend to its ordered aspect, to regular sequences of events, to a stable center of the universe (the sun, the church, the state, the home, the parent, God, eternity, etc.), or one may instead attend primarily to the eccentric, the relative, and the arbitrary aspect of the world (the briefness of the individual life, the blind uncaringness of matter, the sometime hypocrisy of authority, accidents of circumstance, the presence of evil, tragic fate, the impossibility of freedom for the only organism capable of conceiving freedom, and so on).

"Either of these alternative perceptual decisions may be associated with a high degree of personal effectiveness. It is as though there is an effective and an ineffective aspect of each alternative. Our thinking about these various aspects is as yet based only upon clinical impressions of our subjects, but it is perhaps worth recording while we go on with the business of gathering more objective evidence.

"At its best, the decision in favor of order makes for personal stability and balance, a sort of easy-going optimism combined with religious faith, a friendliness towards tradition, custom, and ceremony, and respect for authority without subservience to it. This sort of decision will be made by persons who from an early age had good reason to trust the stability and equilibrium of the world and who derived an inner sense of comfort and balance from their perception of an outer certainty.

"At its worst, the decision in favor of order makes for categorical rejection of all that threatens disorder, a fear of anything which might bring disequilibrium. Optimism becomes a matter of policy, religion a prescription and a ritual. Such a decision is associated with stereotyped thinking, rigid and compulsive morality, and hatred of instinctual aggressive and erotic forces which might upset the precariously maintained balance. Equilibrium depends essentially upon exclusion, a kind of perceptual distortion which consists in refusing to see parts of reality which cannot be assimilated to some preconceived system.

"The decision in favor of complexity, at its best, makes for originality and creativeness, a greater tolerance for unusual ideas and formulations. The sometimes disordered and unstable world has its counterpart in the person's inner discord, but the crucial ameliorative factor is a constant effort to integrate the inner and outer complexity in a higher-order synthesis. The goal is to achieve the psychological analogue of mathematical elegance: to allow into the perceptual system the greatest possible richness of experience, while yet finding in this complexity some overall pattern. Such a person is not immo-

bilized by anxiety in the face of great uncertainty, but is at once perturbed and challenged. For such an individual, optimism is impossible, but pessimism is lifted from the personal to the tragic level, resulting not in apathy but in participation in the business of life.

"At its worst, such a perceptual attitude leads to grossly disorganized behavior, to a surrender to chaos. It results in nihilism, despair, and disintegration. The personal life itself becomes simply an acting out of the meaninglessness of the universe, a bitter joke directed against its own maker. The individual is overwhelmed by the apparent insolubility of the problem, and finds the disorder of life disgusting and hateful. His essential world view is thus depreciative and hostile.

"We have not hesitated to refer here to perceptual *decision*, to an act of choice on the part of the individual. That is to say, we conceive this as a matter not simply of capacity, but of preference. Such a choice does of course involve perceptual capacity, but beyond capacity it is a matter of orientation towards experience; in a sense, perceptual attitude."

I have given here a somewhat sketchy overview of some of our best established results. Those who are interested in a much fuller picture and in the psychometric details may find them in my forthcoming (fall 1967) book, *Creativity and Personal Freedom*, to be published by D. Van Nostrand Co., and in *Creativity: Its Diversity and Development*, to be published in the spring of 1968 by Holt, Rinehart, and Winston. These results I have elected to emphasize because of their importance to the problem of ego development in persons whose orientation to its experience is a creative one. Let me turn now to my interpretation of what I have earlier referred to as "the experiential fundaments of the ego."

These fundaments are given, I believe, in our own physical and psychical structure and in the furniture and the motion picture of the firmament, which itself has generated both the viewer and the viewed, the eye that looks and the interior and exterior realities that are reflected and that are changed in the perceiving. Though the mind may balk at the idea, cosmological reconstruction of the history of the physical universe tells us that at some point the universe itself generated the structure with which it could view itself. In a sense, it opened an eye upon itself, the prototype of the reflective act.

The rudiments of consciousness proceed from the function of the eye itself in discrimination of outside and inside, opening and shutting, letting in light or excluding it. Whether a thing moves or does not move is of primitive importance, and in lower forms this is expressed simply as reaction to the presence or absence of light.

The human infant, upon opening his eyes, in those first days of establishing place and person, will fixate upon the eyes of the mother, there to find assurance of stability and "looking after" in the face of the unfamiliar. Not to be able to establish an outside is the condition of selflessness, to be taken in both its negative and positive possibilities. "The idiot greens the meadow with his eyes" is a poetic statement, by Allen Tate, of the failure in this fundamental discrimination, although it suggests also a potentiality in this lack of ability to discriminate outer from inner.

The sensory nonvisual world comes to help, of course. There is wet and dry, and hot and cold, and up and down, and pressure ("it hurts") and nonpressure. Even going and staying are not entirely visual. "There goes the BM," or "here it comes," or, much later, "here I come," or "here I go" are rudimentary kinesthetic discriminations of self and the world. They may later have to have words to go with them; and words, through the importance they take on because of their efficiency in getting us life-sustaining information, are a weighty part of our equipment. Yet the primitive kinesthetically experienced goings and comings may not only precede the verbal developmentally but, with the purely visual, may come to occupy permanently the interstices of the conceptual framework of mind. They remain there, effective though unnoticed and largely unverbalizable. To restore them to attention is surely one of the functions of the arts of sculpture, architecture, and painting.

The baby, then, notices mostly whether things are here or there, moving or being still, outside or inside, wet or dry, warm or cold, pleasing or displeasing, serving or disserving, producible by action on the part of the self or simply autonomous or the result of chance.

Perhaps the chief internal structures in these rudimentary analogues of the psychic basis of reflection, repression, and production are the orifices of the body and its integument—boundaries and portals. The production of self-initiated effects, especially in their developing reciprocal relationship with autonomous external forces, and especially also as they involve objective mastery and an internal sense or feeling of competence, serve to define the self in terms of process and structure *as reflected*. There is more to this than simple competence, however; there is fitness, or a sort of symbolic aptness or equivalence, between the self-initiated act and the *delighting* effect, which in turn serves as a fundament of ego and a motive towards creation of effects at a much later stage of development.

After these early discriminations come others which emphasize more the content and process of the firmament. Fundamental to process are rhythms:

periodicities such as the gross ones of night and day and the turning of the seasons, or the more internally signaled ones of the beating of the heart or the taking in and letting out of breath. These periodicities are reinforced by the social practices that arrange themselves around physical rhythms: habitual times for taking meals, for example, or, at a more complex and symbolic level, the observation of holidays with their freight of religious meaning.

Sun and moon, stars, the wind, rocks, flowers, water, fire—these give us the colored and moving, or uncolored and stationary world. In the childhood of philosophy, earth and fire and air and water were thought the stuff of life, and they are the universal early experiences of children. The moon is said to be the eye of night, and the sun the warming yet sometimes fierce eye of day. Not to look at the sun directly is one of the earliest adaptations, and indeed may be the prototype of the act of repression.

The seasons in their turning go sometimes in simple doubles, sometimes in double doubles; like hot and cold, we have summer and winter, and like our bodily wets and drys we have the rains and the dry spells. The moon, unlike the sun, changes shape and appears at what may seem whimsy of position and time—the moon is fickle—the moon also is definer of month, and of menses, and of mind (mens, mensis), and of mensuration. The eggs of females go by the moon, and so do the tides, and some think even that madness or lunacy does. The moon gives us numbers to go by: 28, 14, multiples of 2 and 4 and 7. Through the sun and the moon and the seasons we learn of the wheel—gyres—the turning around and around of the great orbs. Gyration is the most forcible of the periodicities that the universe shows us in showing its face to us.

Facedness itself is one of the fundamentals of structure out of which many processes grow. We face forward in time, and we look ahead in space. What we may yet experience lies ahead of us. How we see ourselves in a mirror tells us of ourselves. Other faces too can mirror us. We may use our face to mask ourselves as well as to express or assert—and unused at all it seems to *be* ourselves.

Very early in life we learn of growth. There are bigger ones of the same shape, and we may even see photos that show they were once small. We can see ourselves growing. Near this realization comes also the realization of death—"What would happen if I became bigger and bigger and bigger?" The rule is that whatever grows must die, and that there is a limit to growth. Cancer is consequent upon the failure of tissue to enforce the normal inherent restraint upon growth.

The central fact of fate for everyone is death, and the ego marshals all its

resources to accommodate itself to this fact. Culture is replete with the most elegant of symbolic constructions aimed at denying the finality of death. Christianity and Buddhism, while they are at opposite poles in their interpretation of the sources and governance of the cosmos, are identical in the mission assigned their archetypal personage: both Christ and the Buddha are to conquer death. The Judaic-Christian monotheistic account of the Creation, the Fall, and the Redemption is a story of God the Father's enmity towards man, God the Son's love and pity for him, and God the Holy Spirit's gift of grace; the Father establishes the law from of old, and punishes; the Son dies for all, and so redeems; the Holy Spirit comes with a saving gift, something free, and so blesses. A well-rounded tale, whether "true" or not. Some of the greatest minds of Western culture have been at pains to elaborate the metaphysics and theology of this account of the universe and man's fate, and in many cases the story has used elements of pre-Christian myths from Greece and the Middle East to establish the character of the personages of the drama. The study of myth and symbol is one of the most fascinating branches of the psychology of the ego, and it tells us over and over again that the questions of children about their origins and their fate are original religion and poetry.

The end of innocence and the beginning of experience (to use again the terms of William Blake) has as point of passage the recognition that one is fated. Death is not all of fate, of course; being a woman or a man, with all that the differentiation of sexual function entails, is one of the most powerful aspects of fate, and behind it lies the fact of permanent division of the two generative principles. Plato in "The Symposium" has given us a most beautiful statement of various human thoughts on the subject of love, and one of the most striking of these is the theory he puts into the mouth of Anaximander: that male and female were once one but in time beyond memory were divided into two parts that continually seek one another. Herman Melville expressed this thought in a poem, which emphasizes that this aspect of fate is a bitter one:

> What cosmic jest or anarch blunder
> The human integral clove asunder
> And shied the fractions through life's gate.
> And such the dicing of blind fate
> Few matching halves here meet and mate.

Changes are rung on this theme in all the love stories and the love lyrics of the world, and a nostalgia for the condition of unseparatedness must be counted among the most primitive of feelings, a response to the counterpart of death in human fate.

There are of course many common but less universal aspects of individual fate that enter into consciousness at nearly the same time in the child's development (differences from others in race, strength, health, beauty, status, and so on). The general point is that the recognition of the fact that fate has things in store for one, and that the individual has no choice in the matter, is significant in ego formation; this marks the end of innocence and the beginning of the development of "persona."

I believe that it is at this point that a decisive bifurcation may occur, one psychic path leading to a way of being that remains open to experience and the other leading to a personal adjustment that is "normal" but that is achieved at the cost of repression of the spontaneity and wonder of childhood. The person who is open to experience does not separate himself from the process of life by repression but rather gives himself over to the life processes within him. Because the childhood experiences are thus retained in consciousness and integrated into the personality, "regression in the service of the ego" is in fact not necessary; rather, a progression has occurred that keeps the best of innocence while moving ahead to the command and control that experience brings. I have elsewhere described creative architects whom we studied in our researches as "practical transcendentalists," and this phrase I think captures something of what I have been trying here to elucidate in terms of ego development. One might also say that in creativity we have a love-marriage of innocence and experience, thus implying that they need not be separated. Or, to put it another way, the creative individual retains his innocence in the face of fate. I am reminded of a passage from the great Indian poet Rabindranath Tagore, who wrote of children: "They build their houses with sand, and they play with empty shells. With withered leaves they weave their boats and smilingly float them on the vast deep. Children have their play on the seashore of worlds. They know not how to swim, they know not how to cast nets. Pearl-fishers dive for pearls, merchants sail in their ships, while children gather pebbles and scatter them again. They seek not for hidden treasures, they know not how to cast nets."

In the creative adult, the child remains fully alive.

Frank Barron is a research psychologist at the Institute of Personality Assessment and Research, University of California, Berkeley.